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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,414	08/20/2001	Ralf Eckert	LNUP:106_US_	5724

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EXAMINER

GORDON, BRIAN R

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/933,414

**Applicant(s)**

ECKERT ET AL.

**Examiner**

Brian R. Gordon

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1-20-04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 20, 2004 has been entered.

### ***Response to Arguments***

2. Applicant's arguments, see page 3 of remarks, filed January 20, 2004, with respect to the rejection(s) of claim(s) 1-10 under 35 U.S.C. 103 (a) over Ljungmann have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Keefe US 5,573,727.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed,

had possession of the claimed invention. The specification discloses achieving optimization from calculating the optimum arrangement of stations **or** the shortest movement distance. There is no evidence that optimization is achieved by performing both minimizing the movement distances and rearranging the stations.

As to claims 3 and 4 the disclosure is insufficient for providing support for employing a graph theory approach and network planning technique. The specification and claims fail to define and describe what applicant considers "a graph theory approach" and "network planning technique". The specification also fails to provide any working examples of implementation of the graph theory and network planning technique for one to reasonably determine what is meant by each of the above recited limitations.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It appears that claim 1 is intended to be a Jepson claim, in which the novelty is the addition of process limitations to a previous existing method. However, it is unclear what is the existing process being improved. The preamble of the claim cites an apparatus that is intended to be used in the existing method as well as the improved method. However, applicant has not provided clear process steps of the original

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method. Therefore it is unclear where, how, and when the additional improvement steps are applied in relationship to original method.

The specification discloses achieving optimization from calculating the optimum arrangement of stations **or** the shortest movement distance. There is no evidence that optimization is achieved by performing both minimizing the movement distances and rearranging the stations.

It is not clear how and why one would perform both steps simultaneously in the process of optimization.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 4-7, and 10 rejected under 35 U.S.C. 102(b) as being anticipated by Keefe US 5,573,727.

Keefe discloses “an improved, automatic slide specimen staining apparatus. The apparatus includes a covered housing containing a plurality of baths, input and withdrawal drawers and a three direction slide racks transport mechanism. The transport mechanism is controlled in its movement of slide racks, from bath to bath between an initial position to a final position; the transport mechanism is under the control of a microprocessor control system programmed with a series of staining schedules that are operator selective for a given slide rack input from the initial position,

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the microprocessor control system interactively determining individual slide rack movement timing through selected baths." (abstract)

The stainer comprises a casing 12 which includes a plurality of baths 20 for holding various concentrations of chemicals needed for the staining treatment of slide specimens. These baths are arranged an array comprising two parallel rows. This array may be linear, but is preferably a two-dimensional array as shown in order to reduce the distances between any two baths (implicating the possible rearrangement of the stations to shorten movement distances). Slide racks 21 are configured to fit into the baths, one at a time, and to allow immersion of the relevant portions of the slide specimens in order that staining can occur.

"The staining apparatus however, is particularly beneficial for processing a plurality of slide racks simultaneously. Usually the slide racks would be entered one at a time through the entrance drawer 16 into the first position of the array within the casing 12. Upon the operator closing the drawer 16, selecting the required schedule or programming a further schedule via the keypad 27, and by initiating control of the further slide rack by pressing switch 28, the microprocessor then makes a series of assessments (calculations of the shortest distance movements) before starting the movement of the rack through the selected schedule. In a simple schedule a slide rack may proceed through a series of baths and never be immersed in the same bath twice. In this simple case any following slide racks merely need to be delayed for a certain time in order to avoid any clashes caused by the further slide rack "catching up" with the previous slide rack. The microprocessor is able to assess the time delay required to

avoid these clashes and thereby delays the starting of the staining schedule of the further slide rack until this time delay has elapsed. Although the carriage arrangement and its XYZ capability for movement has dramatically decreased the travel time between subsequent baths, the control system microprocessor must also take into consideration an element of travel time in moving between various racks and also since in this particular embodiment there is only one movement means, no two scheduled steps can occur at the same time. The control means microprocessor means must therefore not only allow for the delay time needed to avoid clashes but also the travel time of the carriage arrangement and the meshing of the schedules in order that the movement arm only needs to move one slide rack from one bath to the next at any one point in time.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keefe US 5,573,727.

Keefe does not specifically disclose the device as employing a mathematical model comprising a graph theory approach or and external computer.

It would have been obvious to one of ordinary skill in the art at the time of the invention to recognize that an external computer may control the staining device. It is well known and conventional in the art for devices to be operated remotely via external computers to allow interfacing of numerous analysis instruments to collect and analyze data from each of the instruments. It is further known that the computers operate by using numerical code and employ graphical software to calculate and process information.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tseung et al., Dorenkamp et al., Corio et al. Disclose histological and cytological devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

brg

  
Jill Warden  
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